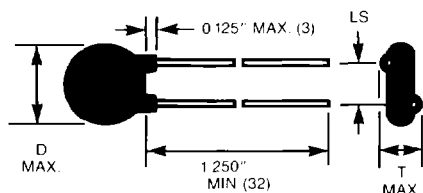


LOW VOLTAGE 12V to 1KV CAPACITORS

Capacitors on pages 18 and 19 are stocked at the factory and are in distribution. See pages 20 and 21 for other electrical and mechanical options.

Figure 1



STANDARD WIRE SIZE
 C and E Sizes
 24 Gauge (.020")
 Tin Coated Copperweld
 F thru Q Sizes
 22 Gauge (.025")
 Tin Coated Copper

Figure 1a Dimensions are inch (cm.)

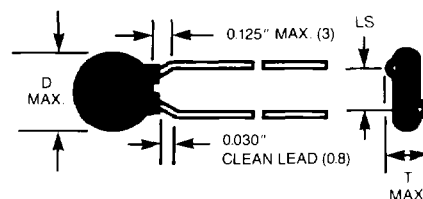


Figure 2

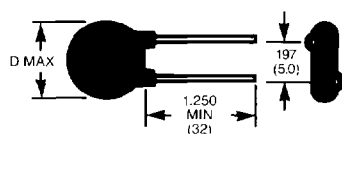


Figure 3

TAPE AND REEL STANDARDS

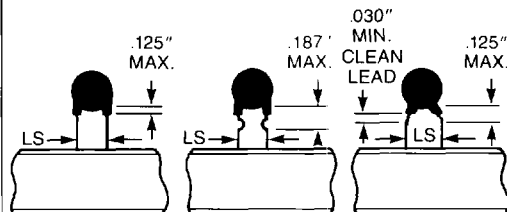
Cataloged product 12 thru 1000 volts with size code C to H are available tape and reeled to EIA RS468 on a special order basis. 10,000 piece minimum, three lead styles are available.

To order tape and reel, add to catalog number the lead style type:

Example: TGS10 QA (Style)

LS is 5 mm (.197) for tape and reel.

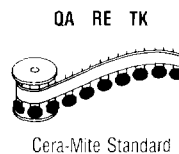
TYPE QA/QR TYPE RE/RR TYPE TK/TR
 Figure 1a only



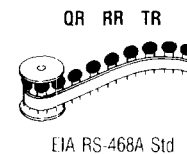
Use if leads are to be formed. Will furnish if nothing else specified.

Most stable seating plane for auto insertion. Keeps rundown out of holes.

Controls coating run-down with low seated height.



Cera-Mite Standard



EIA RS-468A Std

Size Code	Maximum Diameter		Maximum Thickness		Fig. 1 & 1a Lead Spacing	
	IN	MM	IN	MM	IN	MM
C	.250"	6.3	.156"	4.0	.250	6.3
E	.290"	7.4	.156"	4.0	.250	6.3
F	.370"	9.4	.156"	4.0	.250	6.3
G	.440"	11.2	.156"	4.0	.250	6.3
H	.490"	12.4	.156"	4.0	.250	6.3
H ³	.490"	12.4	.156"	4.0	.375	9.4
J	.560"	14.2	.156"	4.0	.375	9.4
K	.630"	16.0	.156"	4.0	.375	9.4
L	.680"	17.0	.156"	4.0	.375	9.4

Size Code	Maximum Diameter		Maximum Thickness		Fig. 1 & 1a Lead Spacing	
	IN	MM	IN	MM	IN	MM
M	.760"	19.3	.156"	4.0	.375	9.4
P	.890"	22.4	.156"	4.0	.375	9.4
R	.510"	13.0	.200"	5.1	.250	6.3
U	.640"	16.3	.200"	5.1	.375	9.4
W	.700"	17.8	.200"	5.1	.375	9.4
X	.770"	19.6	.200"	5.1	.375	9.4
Y	.900"	22.5	.200"	5.1	.375	9.4
Q	.950"	24.1	.200"	5.1	.375	9.4

100 VOLT GENERAL PURPOSE

562C SERIES

• Application range:
 Up to 250 VDC, 75 VAC RMS**

• Insulation Resistance: 10,000 MΩ minimum; 500 ΩF
 • Dissipation Factor: 3.0% max

• Dielectric Strength:
 750 VDC, 250 VAC RMS

pF	Tol. Code	Catalog Number	Size		Temp. Coef.
			Figure	Code	
10	J	TSQ10	2	C	NPO
22	J	TCQ22	2	C	NPO
33	K	TCQ33	2	C	U2J
47	K	TSQ47	2	C	U2J
100	K	TST10	2	C	X7R
220	K	TST22	2	C	X7R
330	K	TST33	2	C	X7R

μF	Tol. Code	Catalog Number	Size		Temp. Coef.
			Figure	Code	
470pF	K	TST47	2	C	X7R
.001	K	TSD10	2	C	X7R
.0022	K	TSD22	2	E	X7R
.0033	K	TSD33	2	F	X7R
.0047	K	TSD47	2	G	X7S
.0068	K	TSD68	2	G	X7S
.01	K	TSS10	2	H	X7S

μF	Tol. Code	Catalog Number	Size		Temp. Coef.
			Figure	Code	
.005	M	TSD50	1	E	Z5U
.01	M	TGS10	1	F	Z5U
.02	M	TGS20	1	G	Z5U
.022	M	TSS22	1	R	X7S
.047	M	TSS47	1	W	X7S
.050	M	TGS50	1	R	Z5U
.10	M	TGP10	1	W	Z5U

500 VOLT GENERAL PURPOSE

562C SERIES

• Application range:
 Up to 600 VDC, 100 VAC RMS**

• Insulation Resistance: 15,000 MΩ minimum; 750 ΩF
 • Dissipation Factor: 3.0% max

• Dielectric Strength:
 1500 VDC, 300 VAC RMS

μF	Tol. Code	Catalog Number	Size		Temp. Coef.
			Figure	Code	
.001	K	5TSD10	1a	E	X7R
.001	M	5TSSD10	1a	C	Y5U
.0022	K	5TSD22	1a	F	X7R
.0033	K	5TSD33	1	G	X7R
.0047	K	5TSD47	1	H	X7R
.005	Z	5TSD50	1	F	Z5U
.0068	K	5TSD68	1	H	X7R

μF	Tol. Code	Catalog Number	Size		Temp. Coef.
			Figure	Code	
.01	K	5TSS10	1	J	X7R
.01	M	5GASS10	1	G	Z5U
.01	Z	5HKSS10	1	G	Z5U
.02	M	5GASS20	1	J	Z5U
.022	M	5TSS22	1	K	X7S
.033	M	5TSS33	1	X	X7S
.05	M	5GASS50	1	P	Z5U

μF	Tol. Code	Catalog Number	Size		Temp. Coef.
			Figure	Code	
.05	Z	5HKSS50	1	U	Z5U
.10	M	5GAP10	1	X	Z5U
.10	Y	5HKSP10	1	Q	Y5V
.10	Z	5HKP10	1	X	Z5U
.15	Y	5GAP15	1	Y	Z5U
.20	M	5GAP20	1	Q	Z5U

**See page 17 for application limits on AC voltage

1000 VOLT GENERAL PURPOSE

562C SERIES

• Application range:
Up to 1000 VDC, 150 VAC RMS**

• Insulation Resistance: 20,000 MΩ minimum; 1000 ΩF
• Dissipation Factor: 2.5%

• Dielectric Strength:
2500 VDC, 500 VAC RMS

pF	Tol. Code	Catalog Number	Size		Temp. Coef.	μF	Tol. Code	Catalog Number	Size		Temp. Coef.	μF	Tol. Code	Catalog Number	Size		Temp. Coef.
			Figure	Code					Figure	Code					Figure	Code	
10	M	5GAQ10	1a	C	NPO	.001	M	5GAD10	1a	E	X5S	.0050	M	5GAD50	1	F	Z5U
20	M	5GAQ20	1a	C	NPO	.001	P	5HKD10	1a	E	Y5U	.0068	M	5GAD68	1	G	Z5U
33	M	5GAQ33	1a	E	U2J	.0012	M	5GAD12	1a	E	Z5U	.0082	M	5GAD82	1	H	Z5U
47	M	5GAQ47	1a	E	U2J	.0015	M	5GAD15	1a	E	Z5U	.01	M	5GAS10	1	H ³	Z5U
100	M	5GAT10	1a	C	X5F	.0020	M	5GAD20	1	E	Z5U	.01	M	5HKMS10	1	H	Z5U
150	M	5GAT15	1a	C	X5F	.0022	M	5GAD22	1	E	Z5U	.01	P	5HKS10	1	H ³	Z5U
200	M	5GAT20	1a	C	X5F	.0025	M	5GAD25	1	E	Z5U	.015	M	5GAS15	1	J	Z5U
220	M	5GAT22	1a	C	X5F	.0027	M	5GAD27	1	E	Z5U	.020	M	5GAS20	1	L	Z5U
330	M	5GAT33	1a	C	X5F	.0030	M	5GAD30	1	E	Z5U	.050	M	10HKS50	1	X	Z5U
470	M	5GAT47	1a	C	X5F	.0033	M	5GAD33	1	E	Z5U	.10	M	10GAP10	1	Q	Z5U
500	M	5GAT50	1a	C	X5F	.0047	M	5GAD47	1	F	Z5U	.15	M	10GAP15	1	Q	Y5V

1 KV TEMP. AND VOLTAGE STABILIZED, 10% TOL.

562C SERIES

• Application range:
Up to 1250 VDC, 200 VAC RMS**

• Insulation Resistance: 50,000 MΩ minimum; 1000 ΩF
• Dissipation Factor: 2.0%

• Dielectric Strength:
2500 VDC, 750 VAC RMS

pF	Catalog Number	Size		Temp. Coef.	pF	Catalog Number	Size		Temp. Coef.	pF	Catalog Number	Size		Temp. Coef.	pF	Catalog Number	Size		Temp. Coef.
		Figure	Code				Figure	Code				Figure	Code				Figure	Code	
10	10TSQ10	1a	C	NPO	75	10TSQ75	1a	C	X5F	270	10TST27	1a	C	X5F	820	10TST82	1a	E	X5F
25	10TSQ25	1a	E	NPO	82	10TSQ82	1a	C	X5F	300	10TST30	1a	C	X5F	.001μF	10TSD10	1a	E	X5F
27	10TSQ27	1a	C	U2J	100	10TST10	1a	C	X5F	330	10TST33	1a	C	X5F	.0015	10TSD15	1	G	X5F
30	10TSQ30	1a	C	U2J	120	10TST12	1a	C	X5F	390	10TST39	1a	C	X5F	.0020	10TSD20	1	H ³	X5F
33	10TSQ33	1a	E	U2J	150	10TST15	1a	C	X5F	470	10TST47	1a	C	X5F	.0022	10TSD22	1	H ³	X5F
39	10TSQ39	1a	E	U2J	180	10TST18	1a	C	X5F	500	10TST50	1a	C	X5F	.0027	10TSD27	1	J	X5F
47	10TSQ47	1a	E	U2J	200	10TST20	1a	C	X5F	560	10TST56	1a	E	X5F	.0033	10TSD33	1	J	X5F
50	10TSQ50	1a	E	U2J	220	10TST22	1a	C	X5F	680	10TST68	1a	E	X5F	.0047	10TSD47	1	L	X5F
56	10TSQ56	1a	C	X5F	250	10TST25	1a	C	X5F	750	10TST75	1a	E	X5F	.01	10TSS10	1	K	X5S
68	10TSQ68	1a	C	X5F															

1 KV NPO/N750 PRECISION DISC CAPACITORS, 5% TOL.

561C SERIES Temperature/Frequency/Voltage Stable

• Application range:
Up to 1500 VDC, 300 VAC RMS**
• dV/dt up to 10,000 V/usec

• Insulation Resistance: 100,000 MΩ minimum; 1000 ΩF
• Dielectric Strength: 2500 VDC, 750 VAC RMS
• High Q: 1000; Dissipation Factor 0.1%

• Application: NPO capacitors are used when the ultimate in stability is required.
• N750/S3L are smaller and ideal for "lossless snubbers."

pF	Catalog Number	Size		pF	Catalog Number	Size		pF	Catalog Number	Size		pF	Catalog Number	Size		Temp. Coef.
		Figure	Code			Figure	Code			Figure	Code			Figure	Code	
1.0	10TCCV10	1a	C	10	10TCCQ10	1a	C	47	10TCCQ47	1	G	N750/S3L DISC CAPACITORS				
2.2	10TCCV22	1a	C	12	10TCCQ12	1a	C	50	10TCCQ50	1	G	33	10TCUQ33	1a	C	U
2.7	10TCCV27	1a	C	15	10TCCQ15	1a	C	56	10TCCQ56	1	G	47	10TCUQ47	1a	C	U
3.0	10TCCV30	1a	C	18	10TCCQ18	1a	E	68	10TCCQ68	1	H	68	10TCUQ68	1a	F	U
3.3	10TCCV33	1a	C	20	10TCCQ20	1a	E	82	10TCCQ82	1	H ³	100	10TCUT10	1a	F	U
3.9	10TCCV39	1a	C	22	10TCCQ22	1a	E	100	10TCCT10	1	J	220	10TCUT22	1	G	V
4.7	10TCCV47	1a	C	25	10TCCQ25	1a	E	120	10TCCT12	1	J	330	10TCUT33	1	H	V
5.0	10TCCV50	1a	C	27	10TCCQ27	1a	F	150	10TCCT15	1	K	470	10TCUT47	1	J	V
5.6	10TCCV56	1a	C	30	10TCCQ30	1a	F	180	10TCCT18	1	L	560	10TCUT56	1	J	V
6.8	10TCCV68	1a	C	33	10TCCQ33	1a	F	220	10TCCT22	1	M	680	10TCUT68	1	K	W
8.2	10TCCV82	1a	C	39	10TCCQ39	1a	F	270	10TCCT27	1	P	1000	10TCUD10	1	L	W

• Application:
Low Voltage Bulk Filter

12/25/50/100V HYPERCON HIGH-CAPACITANCE DISCS

563C SERIES CLASS IV DIELECTRIC

12VDC, Y5R, 2.5ΩF, 5% DF					25VDC, Y5R, 5ΩF, 5% DF					50VDC, Y5R, 25ΩF, 4% DF					100VDC, Y5S, 100ΩF, 3% DF				
μF	Tol. Code	Catalog Number	Size		μF	Tol. Code	Catalog Number	Size		μF	Tol. Code	Catalog Number	Size		μF	Tol. Code	Catalog Number	Size	
			Figure	Code				Figure	Code				Figure	Code				Figure	Code
.05	Y	HY105	1a	E	.01	M	HY820	1a	C	.01	M	HY920	1a	C	.0022	M	HMMD22	2	C
.10	M	HY110	1	G	.022	M	HY825	1a	E	.022	M	HY925	1a	F	.0047	M	HMMD47	2	C
.22	M	HY122	1	J	.033	M	HY530	1a	E	.047	M	HY935	1	G	.01	M	HMMS10	1a	E
.47	M	HY147	1	P	.047	M	HY835	1	F	.10	M	HY950	1	H	.1	M	HMMP10	1	L
					.10	M	HY850	1	G										

**See page 17 for application limits on AC voltage

ELECTRICAL AND MECHANICAL OPTIONS

The most popular values and constructions are shown on pages 18 and 19 for 12 volt to 1KV ratings and on page 24 for 2 to 6KV ratings. Other values and other lead styles are available. The tables following show the complete range of product. Other lead styles are shown on page 21 and an 18 character alpha-numeric designator is shown. The Cera-Mite appli-

cation engineer will provide a certified outline drawing and a correct part number for the options specified. Customer approval of the outline is usually requested to guarantee satisfaction.

All of the performance characteristics shown in the catalog apply to the options unless otherwise stated on the outlines.

562 and 564 Class II & III Series Electrical Options (General Purpose)

Ceramic Type	Range of Values (picofarads)					Tolerances		
	500V Size C thru Q	1000V Size C thru Q	2000V Size E thru Q	3000V Size E thru Q	6000V Size F thru P	500	1000V	2 to 6KV
X5F	200 – 22,000	100 – 20,000	68 – 12,000	47 – 10,000	47 – 2,200	K,M	K,M	K,M
X5S	400 – 25,000	300 – 25,000	470 – 15,000	390 – 10,000	220 – 2,700	M	K,M	K,M
X7R	500 – 33,000	390 – 33,000	680 – 22,000	470 – 15,000	560 – 4,700	K,M	K,M	K,M
Y5U	1000 – 50,000	750 – 50,000	560 – 33,000	390 – 22,000	470 – 5,600	M	M	M,Y
Z5U	1,500 – 100,000	1,000 – 100,000	1,000 – 47,000	680 – 33,000	820 – 10,000	M,Z	M,Z	M,Z
Y5V	2,000 – 200,000	1,500 – 150,000	15,000 – 100,000	1,000 – 50,000	N/A	Y,Z	M,Z	M,Z

Note: 100V ratings are available in same ranges as 500V.

561 and 564 Class I Series Electrical Options (Precision and over 50 kHz)

Ceramic Type	Range of Values (picofarads)				Tolerances
	500V Size C thru L	1000V Size C thru M	2000V Size E thru P	3000V Size E thru P	
NPO	10 – 390	1 – 330	1 – 270	1 – 180	C,D,J,K
N750	47 – 680	22 – 470	10 – 330	10 – 270	J,K
N1000	56 – 820	33 – 560	15 – 390	10 – 330	J,K
N2200	68 – 750	56 – 680	33 – 560	22 – 470	J,K
N3300	100 – 1,000	75 – 820	47 – 750	33 – 560	J,K
N4700	N/A	330 – 5,600	220 – 4,700	100 – 3,300	K,M

Note: Cera-Mite also offers capacitors in N030, N080, N150, N220, N330 and N470 characteristics to serve those older radio and tuning applications requiring TC matching. Values are available in the same range as NPO.

DESCRIPTIVE DESIGNATOR USED FOR PARTS NOT LISTED IN CATALOG BUT SELECTED FROM RANGE CHARTS

